

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-16 (Canceled).

Claim 17 (Previously Presented): The lithium secondary battery according to claim 21, wherein the cathode further contains polyvinylidene fluoride as a binder.

Claim 18 (Previously Presented): The lithium secondary battery according to claim 23, wherein Nb is present in an amount of 0.001 to 0.1 at%.

Claims 19-20 (Canceled).

Claim 21 (Currently Amended): A lithium secondary battery comprising a cathode, an anode and a polymer-based solid electrolyte, wherein a lithium-containing composite oxide comprising lithium cobalt oxide and a subordinate component element M, wherein M is a transition or ~~typical~~ other metal element exclusive of Li and Co, in an amount of 0.001 to 2 at% relative to cobalt in the lithium cobalt oxide, is a cathode active substance of the cathode.

Claim 22 (Previously Presented): The lithium secondary battery according to claim 21, wherein subordinate component element M is at least one of Ti, Nb, Sn and Mg.

Claim 23 (Previously Presented): The lithium secondary battery according to claim 21, wherein subordinate component element M is Nb.

Claim 24 (Previously Presented): The lithium secondary battery according to claim 21, wherein the anode comprises a carbonaceous material.

Claim 25 (New): The lithium secondary battery according to claim 21, wherein the polymer-based solid electrolyte is gelled.

Claim 26 (New): The lithium secondary battery according to claim 25, wherein the polymer-based solid electrolyte has a thickness of 5 to 100  $\mu\text{m}$ .

Claim 27 (New): The lithium secondary battery according to claim 25, wherein the polymer-based solid electrolyte has a thickness of 5 to 60  $\mu\text{m}$ .

Claim 28 (New): The lithium secondary battery according to claim 25, wherein the polymer-based solid electrolyte has a thickness of 10 to 40  $\mu\text{m}$ .

Claim 29 (New): The lithium secondary battery according to claim 21, wherein the polymer-based solid electrolyte comprises a homopolymer of poly(vinylidene fluoride).

Claim 30 (New): The lithium secondary battery according to claim 29, wherein the homopolymer of poly(vinylidene fluoride) is produced by an emulsion polymerization process.